

WHAT IS CLAIMED IS:

50 7
1. An image processor, wherein characteristics of a plurality of skin colors are classified beforehand, comprising:

5 an area extractor which extracts skin areas from input image data according to the classification of the characteristics of a plurality of skin colors; and

10 10 an image corrector which corrects image data of each of the skin areas extracted by said area extractor according to the characteristics of the skin color of the each of the skin areas.

15 2. The image processor according to claim 1, wherein said area extractor determines the characteristic of skin according to average, dispersion and center of gravity obtained from a histogram of image data of each of the skin areas.

20 3. The image processor according to claim 1, wherein said image corrector prepares a histogram of hue for each of the skin areas extracted by said image extractor, modifies the histogram to shift the center of gravity thereof to come close to center of gravity of a memory color of the skin color according to the characteristic of skin color of the each of the skin areas, generates a correction curve for correcting the image data according to the modified 25 histogram, and corrects the image data in the skin area

according to the correction curve.

4. The image processor according to claim 3, wherein said image corrector prepares a histogram of chroma for each the skin areas extracted by said image extractor, modifies 5 the histogram according to the characteristic of skin, and generates a correction curve for the image data in the skin area.

5. The image processor according to claim 4, wherein when the skin areas are extracted from the input image data, 10 said area extractor extracts skin candidate areas from image data, converts color specification system of the image data for each of the skin candidate areas and extracts skin areas from the skin candidate areas based on the image data in the color specification system.

6. The image processor according to claim 5, wherein 15 said area extractor comprises a divider which divides the image data into rectangle areas, and an area integrator which integrates the rectangle areas for each of the characteristic when the skin areas are extracted, wherein 20 said area integrator integrates adjacent pixels if difference in hue between adjacent pixels is within a threshold determined for each skin type.

7. The image processor according to claim 1, wherein 25 said image corrector prepares a histogram of chroma for each of skin areas extracted by said image extractor, modifies

the histogram according to the characteristic of skin, and generates a correction curve for correcting the image data.

8. The image processor according to claim 1, wherein

when the skin areas are extracted from the input image data, said area extractor extracts skin candidate areas from image data, converts color specification system of the image data for each of the skin candidate areas and extracts skin areas from the skin candidate areas based on the image data in the color specification system.

9. The image processor according to claim 1, wherein said area extractor comprises a divider which divides the image data into rectangle areas, and an area integrator which integrates the rectangle areas for each of the characteristic when the skin areas are extracted, wherein said area integrator integrates adjacent pixels if difference in hue between adjacent pixels is within a threshold determined for each skin type.

10. An image processing method, wherein characteristics of a plurality of skin colors are classified beforehand, the method comprising the steps of:

extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors; and

25 correcting image data of each of the extracted skin areas according to the characteristics of the skin

color of each of the skin areas.

11. The image processing method according to claim 10,
wherein said image correction step comprises the steps of:
preparing a histogram of hue of each of the
extracted skin areas;

changing the histogram to shift the center of gravity thereof to come close to center of gravity of a memory color of the skin color according to the characteristic of skin color of the each of the skin areas;

generating a correction curve for correcting the image data according to the modified histogram; and

correcting the image data in the skin area according to the correction curve.

12. A computer-readable storage medium storing a computer program comprising the steps of:

providing classification of characteristics of a plurality of skin colors;

extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors; and

correcting image data of each of the extracted skin areas according to the characteristics of the skin color of the each of the skin areas.

13. The computer-readable storage medium according to
claim 12, wherein in said extracting step, the

characteristic of skin is determined according to average, dispersion and center of gravity obtained from a histogram of image data of the skin area.

14. The computer-readable storage medium according to
5 claim 12, wherein in said correcting step, a histogram of
hue of the extracted skin area is prepared, the histogram is
modified to shift the center of gravity thereof to come
close to center of gravity of a memory color of the skin
color according to the characteristic of skin color of each
of the skin areas, a correction curve for image data is
generated according to the modified histogram, and the image
data in the skin area is corrected according to the
correction curve.

15. The computer-readable storage medium according to
claim 14, wherein in said correcting step, a histogram of
chroma of each of the extracted skin areas is prepared, the
histogram is extended according to the characteristic of
skin, and a correction curve for the image data is generated.

16. The computer-readable storage medium according to
20 claim 15, wherein when the skin areas are extracted from the
input image data, skin candidate areas are extracted from
image data, color specification system of the image data is
converted for each of the skin candidate areas and skin
areas are extracted from the extracted skin candidate areas
25 based on the image data in the color specification system.

17. The computer-readable storage medium according to claim 16, wherein in said extracting step, the image data are divided into rectangle areas, and the rectangle areas are integrated for each of the characteristic when the skin areas are extracted, wherein adjacent pixels are integrated if difference in hue between adjacent pixels is within a threshold determined for each skin type.

18. The computer-readable storage medium according to claim 12, wherein in said correcting step, a histogram of chroma of each of the extracted skin areas is prepared, the histogram is modified according to the characteristic of skin, and a correction curve for the image data is generated.

19. The computer-readable storage medium according to claim 12, wherein when the skin areas are extracted from the input image data, skin candidate areas are extracted from image data, color specification system of the image data is converted for each of the skin candidate areas and skin areas are extracted from the extracted skin candidate areas based on the image data in the color specification system.

20. The computer-readable storage medium according to claim 12, wherein in said extracting step, the image data are divided into rectangle areas, and the rectangle areas are integrated for each of the characteristic when the skin areas are extracted, wherein adjacent pixels are integrated if difference in hue between adjacent pixels is within a

threshold determined for each skin type.

Add
vs